

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. (Currently Amended) A computer readable recording medium having a data structure for managing reproduction of video data recorded on the recording medium, comprising:

at least one navigation area storing navigation management information for managing real-time reproduction of multiple reproduction path video data recorded on the recording medium; and

wherein said navigation management information includes at least one navigation unit comprising a plurality of video data packets and a plurality of real-time navigation packets.

2. (Canceled)

3. (Currently Amended) The computer readable recording medium of claim 1, wherein each of said plurality of video packets has a packet identification code that is different from each of said plurality of real-time navigation packets.

4. (Canceled)

5. (Currently Amended) The computer readable recording medium of claim 1, wherein each said plurality of real-time navigation packets are sequentially recorded in the at least one navigation unit.

6. (Canceled)

7. (Canceled)

8. (Canceled)

9. (Currently Amended) The computer readable recording medium as recited in claim 1, wherein each of said plurality of real-time navigation packets includes a header portion and a payload portion.

10. (Canceled)

11. (Canceled)

12. (Currently Amended) The computer readable recording medium as recited in claim 1, further comprising at least one real-time navigation table for storing a plurality of real-time navigation packets each having the same packet identification code.

13. (Canceled)

14. (Canceled)

15. (Currently Amended) The computer readable recording medium as recited in claim 1, wherein said plurality of real-time navigation packets are discontinuously recorded in the navigation unit.

16. (Canceled)

17. (Canceled)

18. (Currently Amended) The computer readable recording medium as recited in claim 1, wherein each of said plurality of real-time navigation packets includes a header portion and a real-time navigation section data portion.

19. (Canceled)

20. (Canceled)

21. (Canceled)

22. (Currently Amended) The computer readable recording medium as recited in claim 1, wherein each of said plurality of real-time navigation packets are physically aligned with at least one corresponding physical recording unit of the recording medium.

23. (Canceled)

24. (Canceled)

25. (Canceled)

26. (Canceled)

27. (Canceled)

28. (Canceled)

29. (Canceled)

30. (Canceled)

31. (Canceled)

32. (Canceled)

33. (Canceled)

34. (Canceled)

35. (Canceled)

36. (Currently Amended) A method of recording a data structure for managing reproduction of real-time navigation video data on a recording medium comprising:

recording navigation management information for managing real-time navigation of multiple reproduction path video data in at least one navigation area of the recording medium;
and

recording at least one navigation unit having a plurality of video packets and real-time navigation packets, each of said plurality of real-time navigation packets having a package identification number different from each of said plurality of video packets.

37. (Currently Amended) A method of reproducing a data structure for managing real-time navigation video data recorded on a recording medium comprising:

reproducing navigation management information for managing real-time navigation of multiple reproduction path video data from at least one navigation area of the recording medium;
and

reproducing at least one navigation unit having a plurality of video packets and real time navigation packets, wherein each of said plurality of real-time navigation packets have a packet identification number different from each of said plurality of video packets.

38. (Currently Amended) An apparatus for recording a data structure for managing reproduction of at least real-time navigation video data on a recording medium comprising:

a driver for driving an optical recording device to record data on the recording medium;
a coder for encoding at least real-time navigation video data; and

a controller for controlling the driver to record the encoded real-time navigation of multiple reproduction path video data on a recording medium, the controller for controlling the driver to record real-time navigation management information for managing reproduction of the real-time navigation information in at least one navigation unit; and

the controller for controlling the driver to record a plurality of real-time navigation packets in the at least one navigation unit and for recording a plurality of video packets, wherein each of said plurality of real-time navigation packets has a packet identification number that is different from each of said plurality of video packets.

39. (Currently Amended) An apparatus for recording a data structure for managing reproduction of real-time navigation data recorded on a recording medium, comprising:

a driver for driving an optical reproducing device to reproduce data reported on the recording medium;

a controller for controlling the driver to reproduce navigation management information for managing real-time navigation of multiple reproduction path data from at least one navigation unit of the recording medium; and

the controller for controlling the driver to reproducing a plurality of video packets recorded on the recording medium using a plurality of real-time navigation packets contained within the at least one navigation unit, wherein each of said real-time navigation packets has a packet identification number that is different from each of said plurality of video packets.

40. (New) The apparatus recited in claim 39, wherein each of said plurality of real-time navigation packets are physically aligned with at least one corresponding physical recording unit of the recording medium,

wherein each of the plurality of real-time navigation packets are physically aligned with a at least one corresponding file system allocation unit, and

wherein each of the plurality of real-time navigation packets are physically aligned with more than one corresponding file system allocation unit.

41. (New) The method according to claim 36, wherein the multiple reproduction path video data includes different versions of a title.

42. (New) The method according to claim 37, wherein the multiple reproduction path video data includes different versions of a title.

43. (New) The apparatus of claim 38, wherein the multiple reproduction path video data includes different versions of a title.

44. (New) The apparatus of claim 39, wherein the multiple reproduction path video data includes different versions of a title.

45. (New) An apparatus for reproducing a data structure for managing reproduction of at least real-time navigation video data on a recording medium comprising:

an optical reproducing device to reproduce data on the recording medium;

a coder for encoding at least real-time navigation video data; and

a controller for controlling the optical recording device to reproduce the encoded real-time navigation of multiple reproduction path video data, the multiple reproduction path data including different versions of a title on a recording medium, the controller for controlling the

driver to record real-time navigation management information for managing reproduction of the real-time navigation information in at least one navigation unit; and

the controller for controlling the optical reproducing device to reproduce a plurality of real-time navigation packets in the at least one navigation unit and for recording a plurality of video packets, wherein each of said plurality of real-time navigation packets has a packet identification number that is different from each of said plurality of video packets.

46. (New) The method of claim 36, wherein each of said plurality of real-time navigation packets are physically aligned with at least one corresponding physical recording unit of the recording medium,

wherein each of said plurality of real-time navigation data is physically aligned with a corresponding physical unit of the recording medium, including an error correction code allocation unit, and

wherein each of said error correction code allocation units includes a plurality of error correction code areas, corresponding to a plurality of alignment units, which in turn correspond to a plurality of section units which correspond to a plurality of transport packets representing the real-time navigation data.